



Bayreuther Zentrum für Ökologie und Umweltforschung

Bayceer

Do. /Thu. 17 st Gebäude/Building GEO Hörsaal/Lecture hall H6 Wintersemester / Winter Term 2013/14

## **BayCEER Kolloquium**

Vortragsreihe Ökologie und Umweltforschung Lecture series in Ecology and Environmental Research

### Donnerstag 17.10.2013, 17:00 Uhr, H6

Anschließend Postkolloquium mit Bier und Brezen im Foyer H6

# **Dr. Rupert Seidl**

Institute of Silviculture, University of Natural Resources and Life Sciences (BOKU), Vienna

#### Die Vortragsreihe ist eine interdisziplinäre Plattform zur Information und Diskussion für Studierende, Forschende und Lehrende

Gäste sind herzlich willkommen

The lecture series serves as an inter-disciplinary platform for students, junior and senior scientists.

> Guests are cordially invited!

## Disturbance modeling: Understanding and predicting forest disturbance dynamics

Disturbances are important drivers of ecosystem dynamics and have a lasting impact on the structure, composition, and functioning of ecosystems. Mediated by changing climatic conditions and altered human land use disturbance regimes are intensifying in many forest ecosystems, a trend with detrimental effects on the provisioning of ecosystem goods and services. In order to prevent such impacts and adapt ecosystem management to intensifying disturbance regimes understanding their drivers and predicting their possible trajectories is of paramount importance.

In my talk I will review approaches of modeling forest disturbances, and suggest a general framework of process-based disturbance modeling. I will furthermore give examples of both explanatory and predictive disturbance modeling, focusing on disturbance from wind, bark beetles, and wildfire. In particular I will highlight the importance of considering multiple scales for understanding drivers of disturbance regimes, and will elucidate on the role of dynamic interactions in space and time (e.g., disturbance between agents, between vegetation and disturbance dynamics) for predicting future trajectories of disturbance regimes.

#### Kurzfassungen und weitere Infos / Abstracts and further information: www.bayceer.uni-bayreuth.de/kolloquium/